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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,034	07/24/2006	Laurence Christa	CHEP:015US/10513205	9442

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EXAMINER	
HOWARD, ZACHARY C	
ART UNIT	PAPER NUMBER
1646	

NOTIFICATION DATE	DELIVERY MODE
10/26/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/561,034	CHRISTA ET AL.	
	Examiner	Art Unit	
	ZACHARY C. HOWARD	1646	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 August 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *18,21-25,27-40 and 43-53* is/are pending in the application.

4a) Of the above claim(s) *27-36,40 and 44-49* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *18,21-25,37-39,43 and 50-53* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *18,21-25,27-40 and 43-53* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 December 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *8/17/10*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Status of Application, Amendments and/or Claims

The amendment of 8/17/10 has been entered in full. Claims 18, 37, 43, 44-47 and 49 are amended. Claims 19, 20, 26, 41 and 42 are canceled (claims 1-17 were canceled previously). New claims 50-53 are added.

Claims 18, 21-25, 27-40 and 43-53 are pending in the instant application.

New claims 50-53 are deemed to belong to the elected group.

Claims 27-36 and 44-49 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made without traverse in the reply filed 11/9/09.

Claim 40 remains withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim.

Claims 18, 21-25, 37-39, 43, and 50-53 are under consideration, as they read upon the elected species.

Withdrawn Objections and/or Rejections

The following page numbers refer to the previous Office Action (4/28/10).

All objections and/or rejections of claims 19, 20, 26, 41 and 42 are moot in view of Applicants' cancellation of these claims.

The rejection of claims 18, 21, 23-25, 37-39 and 43 under 35 U.S.C. § 112, first paragraph at pg at pg 3-12 for failing to provide enablement for the full scope of the claims is *withdrawn* in view of (1) Applicants' amendments to the claims; (2) Applicants' persuasive arguments at pg 8-12 of the 8/17/10 response; and (3) the Declaration of Dr. Jamila Faivre under 37 CFR § 1.132 which provides evidence that "the anti-apoptotic activity of 36-175 HIP/PAP was as high as that of 27-175 HIP/PAP in rat hepatocyte primary cultures" (pg 5).

The further rejection of claim 43 under 35 U.S.C. § 112, first paragraph at pg at pg 9-12 for failing to provide enablement for the full scope of the claim is *withdrawn* on

further consideration by the Examiner. This portion of the rejection concerned the lack of enablement for non-isolated host cells; on further consideration, the fact that the cells of claim 43 must be comprised in a composition is considered to limit the cells to isolated cells that are enabled by the specification.

The rejection of claims 18, 21, 23-25, 37-39 and 43 under 35 U.S.C. § 112, first paragraph at pg 12-14 for failing to comply with the written description requirement is *withdrawn* in view of in view of (1) Applicants' amendments to the claims; (2) Applicants' persuasive arguments at pg 13-15 of the 8/17/10 response; and (3) the Declaration of Dr. Jamila Faivre under 37 CFR § 1.132 which provides evidence that "the anti-apoptotic activity of 36-175 HIP/PAP was as high as that of 27-175 HIP/PAP in rat hepatocyte primary cultures" (pg 5).

Maintained Objections and/or Rejections

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 18, 21-25, 37-39, 43 and 50-53 are rejected under 35 U.S.C. 102(b) as being anticipated by Christa et al (1996. Am J Physiol. 271: G993-G1002). This rejection was set forth at pg 14-18 of the 2/18/10 Office Action for claims 18, 21-25, 37-39 and 43; new claims 50-53 are herewith added to the rejection.

Independent claim 18 has been amended in three ways. First, the reference amino acid sequence has been changed from residues 36-175 of SEQ ID NO: 1 to residues 27-175 of SEQ ID NO: 1. Parent claim 18 was included in the rejection based on Christa et al teaching a composition comprising mature human HIP/PAP (residue 27-175 of SEQ ID NO: 1). Second, claim 18 now recites that the polypeptide is comprised in the composition "as the active ingredient". This term is not defined in the specification (it appears once in ¶ 170, where it is used in conjunction with being "for stimulating liver regeneration in vivo"). As the polypeptide taught by Christa et al is the same as that

encompassed by the instant claims (mature human HIP/PAP), its presence in a composition qualifies it as "an active ingredient". Third, claim 18 now recites that the polypeptide is "is anti-apoptotic *in vitro* in hepatocytes". This characteristic would inherently be shared by the mature human HIP/PAP taught by Christa et al that is identical to the instantly claimed protein. Therefore, it is maintained that the teachings of Christa et al anticipate claim 18, even as amended. Likewise, it is maintained that dependent claims 21-25 are also anticipated by Christa et al.

Independent claims 37 and 43 have each been amended to include the first and third limitations described above. It is maintained that the teachings of Christa et al anticipate claims 37-39 and 43, even as amended, for the same reasons as described above for claim 18.

New claims 50 and 52 each depend from claim 18 and encompass a polypeptide "consisting essentially" of the amino acid sequence from amino acid residue 27 to amino acid residue 175 of SEQ ID NO: 1 (mature human HIP/PAP). The term "consisting essentially" is interpreted as any sequence "comprising" the amino acid sequence which does not materially affect the basic and novel characteristics of the sequence (MPEP 2111.03). Therefore, claims 50 and 52 are included in the rejection for the same reason as for parent claim 18.

New claims 51 and 53 each depend from claim 18 and encompass a polypeptide "consisting" of the amino acid sequence from amino acid residue 27 to amino acid residue 175 of SEQ ID NO: 1 (mature human HIP/PAP). Parent claim 18 was included in the rejection based on Christa et al teaching a composition comprising mature human HIP/PAP (residue 27-175 of SEQ ID NO: 1). Therefore, claims 51 and 53 are included in the rejection for the same reason as for parent claim 18.

Applicants' arguments (8/17/10; pg 15-19) as they pertain to the rejection have been fully considered but are not deemed to be persuasive for the following reasons.

First, it is noted that Applicants' arguments are solely directed to "pharmaceutical compositions" comprising "at least one physiologically acceptable excipient", but claims 37-39 broadly encompass a "composition" comprising a polypeptide and a cell (i.e., there is no limitation with regard to "pharmaceutical" or "at least one physiologically

acceptable excipient"). Applicants conclude their arguments on page 19 by arguing, "[t]hus, claims 18-25 and 43 are novel over Christa (1996) reference because the reference does not teach a pharmaceutical composition as required by the claims" (pg 19). It appears that Applicants submit no arguments against the rejection of claims 37-39. The rejection of claims 37-39 is therefore maintained for the reasons described previously and above.

In the response, Applicants first argue that the claims must include at least one physiologically acceptable excipient, point to the definition of such in the specification at page 20, lines 3-11, and argue that the milk from transgenic mice, and the acetic acid buffer, are not such excipients because "[n]othing in Christa (1996) indicates that the disclosed acetic acid buffer or milk from transgenic mice could be safely used in systemic or topical administration".

Applicants' arguments have been fully considered but are not found persuasive. The definition of physiologically acceptable excipient from the specification at page 20, lines 3-11 was fully considered in the rejection of record (see page 15 of the 2/18/10 Office Action). It is maintained that milk from mice is encompassed by the term "physiologically acceptable carrier" as defined by the application. Applicants provide no evidence that the milk or acetic acid buffer cannot be safely administered in systemic or topical administration. In contrast, the milk was safely produced in the mice from which it is collected, indicating that it is physiologically safe. Furthermore, it is intended for oral consumption which is broadly encompassed by the term "systemic". Furthermore, the acetic acid can also be safely orally administered.

Applicants next argue that the compositions are limited to "pharmaceutical compositions". Applicants dispute that the recitation of "pharmaceutical" indicates an intended use for the composition. Applicants point to MPEP 2111.02(II) as stating that statements in the preamble reciting an intended use must be evaluated to determine if the intended use results in a structural difference between the claimed invention and the prior art. Applicants argue that the skilled artisan would understand, based on the specification, that use as a pharmaceutical results in structural differences between the claimed composition and the prior art. Applicants point to the specification at page 11,

lines 16-26 as teaching that the claimed compositions comprise a polypeptide that is purified.

Applicants' arguments have been fully considered but are not found persuasive. The specification at page 11, lines 16-26 only provides an exemplary teaching regarding the pharmaceutical compositions, "which can be isolated from cell or tissue sources ..." (emphasis added by Examiner). The pharmaceutical compositions can be isolated, but are not required to be isolated. Thus, it is noted that the features upon which applicant relies (i.e., purified or isolated) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicants next argue that "when a pharmaceutical composition comprises a polypeptide as an active ingredient the polypeptide used as an active ingredient must consist of a polypeptide purified according to pharmaceutical requirements" (pg 16). Applicants argue that to be qualified as a protein-containing pharmaceutical composition "involves numerous safety and therapeutic activity requirements" (pg 16-17). Applicants argue that the composition must comply with "generally accepted requirements" with regard to the active ingredient(s) and excipient(s). Applicants argue that an emphasis is place on "the purity requirements relating to the protein active ingredient". Applicants point to "guidelines drafted by national or regional Drug Agencies" and point to seven of such guidelines (including with the response as Appendices C-I). Applicants argue that "basic requirements must be met" that including that the composition does not include a component (a) which is not a chemical entity defined as an active substance, an excipient, or other additives to the medicinal product, and (b) which is a residual cellular protein or other impurities. Applicants argue that "when dealing with protein active ingredients originating from transgenic animals and in particular from transgenic animal milk, the said protein-containing composition must not contain host derived proteins other than the desired product or other host fluids because such host proteins or fluids are likely to be immunogenic or carry infectious agents" (pg 18). Applicants point to the

description of the HIP/PAP proteins in Christa in Figure 2 and argue that they are "not pure" (pg 18-19).

Applicants' arguments have been fully considered but are not found persuasive. Applicants argue limitations that are not found in the claims. The instant specification does not provide a limiting definition of the term "pharmaceutical composition" or "active ingredient" that structurally limits the encompassed compositions, and as such the claims broadly encompass the compositions taught by Christa et al. Applicants' arguments attempt to limit these terms based on guidelines for manufacturers for the production of drugs for human administration, but such guidelines are not binding with respect to the claimed composition.

Appendix C states that it "does not operate to bind ... the public" and have the objective "to support new marketing applications" (pg 1). Appendix D and F are "Guidance for Industry" and "Guideline for Industry" (see titles). Appendix E provides guidance that "manufacturers of such product are generally expected to consider" (pg 3). Appendix G is for "biotechnological/biological products" (pg 265). Appendix H is for "marketing authorisation" (pg 205). Appendix I is titled "Use of Transgenic Animals in the Manufacture Of Biological Medicinal Products for Human Use".

The instant specification does not indicate that the term "pharmaceutical composition" is limited by any guidelines set forth in Appendices A-I. Thus, the claimed composition is not limited to compositions produced by manufacturers in accord with the FDA (or other agencies). MPEP 2107.03.V states, that "[t]he Office must confine its review of patent applications to the statutory requirements of the patent law. Other agencies of the government have been assigned the responsibility of ensuring conformance to standards established by statute for the advertisement, use, sale or distribution of drugs".

The compositions taught by Christa et al could be administered in a research setting and would not be subject to such guidelines. Furthermore, the guidelines set forth in Appendices A-I are intended for drugs for human administration, and say nothing regarding administration to other animals (e.g., mice, which could be administered the milk from the transgenic mice).

It is maintained that the recitation of "pharmaceutical" in the preamble of claims 18 and 43 is interpreted as an intended use and bears no accorded patentable weight to distinguish a claimed product over one from the prior art. A preamble is generally not accorded any patentable weight where it merely recites the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Conclusion

No claims are allowed.

THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary C. Howard whose telephone number is 571-272-2877. The examiner can normally be reached on M-F 9:30 AM - 6:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary B. Nickol can be reached on 571-272-0835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Z. C. H./
Examiner, Art Unit 1646

/Bridget E Bunner/
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